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Investigating English Vowel Reduction in Pronunciation of EFL Teachers of Schools

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Abstract

One of the skills of speaking in a foreign language which has its own difficulties is correct pronunciation. English is not an exception to this rule and one of the challenging parts of this language is the process called vowel reduction which has always been problematic for language learners. This study has been conducted to investigate observing of English vowel reduction in pronunciation of EFL teachers of high schools in Ilam city. For this purpose, it examines the effects of gender, experience and academic degree on the observing of vowel reduction in derivative and function words. The participants of the study were 60 EFL teachers with B.A., M.A., and PhD degrees teaching English in high schools of Ilam city, 30 being male and 30 female. They ranged from 1 to 30 years of teaching experience. The instrument used in the study was a checklist comprising of 30 sentences containing derivative and function words in which the vowel reduction occurs. The results showed that there was a meaningful relationship between gender of the participants and vowel reduction in general and vowel reduction in derivative words but not with function words. Males performed better than females in pronouncing the reduced vowels. There was a meaningful relationship between teaching experience and vowel reduction in general, vowel reduction in derivative words and in function words. The group with 16 to 20 years of teaching experience had the highest mean. The second highest mean belonged to the group of 21 to 25 years of experience. The results also showed that until 20 years of teaching experience, the means of pronunciation increase and after that decrease gradually. There was a meaningful relationship between academic degree and vowel reduction in general, vowel reduction in derivative words and in function words. The PhDs had the highest mean and did better than the MAs and BAs.

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1. Introduction

English as a Lingua Franca, with its increasing function and ubiquitous usage has its own unique phonological system and consequently it has distinctive phonetics and pronunciation. Therefore, intelligibility has undue importance in efficient communication. Pronunciation, incidentally, is one of the key factors for intelligibility and plays a crucial role in communication in a second or foreign language (L2). Even with an extensive vocabulary domain, in a second language and a perfect competence of the structures and rules of the L2, it is not possible to express the messages correctly without accurate and intelligible pronunciation.

In an EFL setting, since there is no access to native speaking teachers or a natural context of using English, the teacher is the only model of pronunciation for language learners. The EFL teacher is supposed to possess at least, a native-like pronunciation capability and skill and try to get a pronunciation that is acceptable and intelligible. Thus, EFL teachers' pronunciation plays a vital role in success of language learners to learn accurate, intelligible and acceptable pronunciation. Consequently, it is quite important and necessary to conduct research to recognize different areas of problem in pronunciation of EFL teachers; one area of which is vowel reduction that this study has been devoted to.

Vowel reduction has been fully scrutinized in English by many scholars. In these studies, all unstressed vowels of English are supposed as being reduced, which means lower in pitch, shorter in duration, less loud in intensity, and rather reduced in vowel quality (Fry, 1955). Vowels in unstressed syllables of lexical words, or vowels in function words are mostly reduced because they lack stress (Ladefoged, 1996). The production and distinction of stress cannot be attributed to one parameter. Thus, the vowel reduction in unstressed ones should be taken into consideration according to the strength of the formant, duration, and intensity parameters. Formant is an acoustic correspond of pitch, which is decided by the shape and length of the speaker's vocal tract. As for vowel quality, reduced vowels are more central than stressed ones (Ladefoged, 1996).

2. Vowel reduction in English

Vowel reduction in English has been fully scrutinized by many scholars in which all unstressed vowels of English are supposed as being reduced, which means lower in pitch, shorter in duration, less loud in intensity, and rather reduced in vowel quality (Fry, 1955). Vowels in unstressed syllables of lexical words, or vowels in function words are mostly reduced because they lack stress (Ladefoged, 1996). The production and distinction of stress cannot be attributed to one parameter. Thus, the vowel reduction in unstressed ones should be taken into consideration according to the strength of the formant, duration, and intensity parameters. Formant is an acoustic correspond of pitch, which is decided by the shape and length of the speaker's vocal tract. As for vowel quality, reduced vowels are more central than stressed ones (Ladefoged, 1996).

2.1.1. Vowel reduction in derivative words

All English vowels can occur in unstressed syllables in their full, unreduced forms, while a reduced vowel is necessarily in an unstressed syllable. Most of the times, full vowels turn into [ə] in their reduced forms. [ə] is the only vowel form that can not occur in stressed syllables in English. According to Yavas (2011) in derivative words, vowel reduction is the result of a change in word category and shift of stress. As the stress is moved to the other syllables, most of the times, the vowel in the unstressed syllable is reduced. [ə] can be substituted by /ɪ/ before palato-alveolars (e.g. sandwich [sændwɪtʃ]) and velars (metric [mɛtɪk]). Some instances of vowel reduction in derivative words are as follows:

Stressed syllable with a full vowel	Reduced syllable with [ə]
1. /aɪ/ design [dɛzəɪn]	designation [dɛzəɡneɪʃn]
2. /eɪ/ rotate [ɹəʊteɪt]	rotary [ɹəʊtəri]
3. /ʌ/ confront [kənfrʌnt]	confrontation [kənfrʌnteɪʃn]

(based on Yavas, 2011, p.92)

2.2. Vowel reduction in function words

According to Fromkin, Rodman and Hyams (2003), function words do not have clear lexical meaning or obvious concepts associated with them and specify grammatical relations. This class of words includes auxiliaries, prepositions, articles, conjunctions, pronouns and some adverbs. The reduced forms of function words are very common in connected speech because most of the time they are not the focus of information. According to Yavas (2011), the citation form in isolation is not the only context that the strong (full) form of these words can be used in. When these words are the focal point of exchange, strong (full) forms are also expected; for example, when given special emphasis or to make a contrast.

Example 1:

a) " You can buy some butter or cream for the breakfast."

b) " You can buy me butter **and** cream for the breakfast."

In the second sentence "and" is used in full form for emphatic purposes.

Example 2:

a) " I can't be there on time."

b) " Yes, you **can**."

In the second sentence "can" is used in its full form for making a contrast.

According to Yavas (2011), auxiliary verbs have certain requirement for their reduced forms. Auxiliary verbs are typically unstressed and reduced except:

A) When they are in the final positions:

a) " Do you remember me?"

b) "I do"

a) "Can you help me?"

b) " I can"

B) When they are used with negative particle **not** and this particle is not in contracted form:

I'm not going to read this book. [aɪ(ə)m...]

In this sentence **am** is contracted, **not** is not.

Regardless of its vital role in comprehension and accuracy, teaching correct pronunciation and finding out students' difficulty in pronunciation is, to a large extent, overlooked by language educators until the 1950s when audio-lingual method placed an emphasis on listening and speaking. One reason was that "the study of pronunciation has been marginalized within the field of applied linguistics" (Derwing & Munro, 2005, p. 379). This lack of attention may be as a result of the difficulty and partiality of the business of teaching and assessing speaking and pronunciation (Celce-Murcia, 2000). Linguists and philologists have studied other skills and sub-skills much longer than pronunciation.

In order to overemphasize the little attention paid to pronunciation in English classrooms, Dalton (1997) called pronunciation the "Cinderella of language teaching". Therefore, EFL teachers' familiarity with and attention to vowel reduction is crucial in EFL pedagogy.

3. Objectives and Significance of the Study

The aim of this study was investigating the level of Ilami high school EFL teachers' consideration and mastery of native-like reduction of English vowels. In other words, this study is an attempt to check the degree of Ilami high school EFL teachers' familiarity with vowel reduction and also the extent to which they perform vowel reduction in their speech. For this purpose the study examines the effects of gender, experience and academic degree on the observing of vowel reduction in derivative words, function words and in general. This study is significant since pronunciation is an important characteristic that is essential for language teachers. EFL teachers are most of the time the first and only model of English language speaking and pronunciation. Therefore, they are expected to be qualified regarding pronunciation. Vowel reduction is an aspect of pronunciation that is important in helping communication go swimmingly and making the speech seem more smooth, easily intelligible and native-like. So, vowel reduction is of great significance for EFL teachers. Owing to the above mentioned issues, this study is a significant step toward

studying vowel reduction. The findings of this study are useful for education organizations which employ EFL teachers such as Ministry of Education, universities and private language institutes. Also, EFL teachers and students might find the results of study being of great help.

Having a great research design is important to create a professional survey. This study is a descriptive survey. In a descriptive study, the information is collected without changing the environment (i.e., nothing is manipulated). Descriptive studies are usually the best methods for collecting information that will demonstrate relationships and describe the world as it exists. Bickman and Rog (1998) suggest that descriptive studies can answer questions such as “what is” or “what was”. It does not answer questions about how/when/why the characteristics occurred. Descriptive research is quantitative in nature. The description is used for frequencies, averages and other statistical calculations survey can be done in different ways. Interviewing people face to face or handing out questionnaires to fill out are common ways. Thus employing a survey method, the current study tried to investigate the relationship between the experience, gender, academic degree of Ilam high schools EFL teachers and observing of vowel reduction in derivative and function words and finally to generalize the findings of this study to a larger population.

4. Methodology

4.1. Participants

The participants of this study comprised of 60 (30 male and 30 female) EFL teachers graduated with B.A, M.A, and PhD degrees in TEFL, English literature, English translation or linguistics from Iranian universities. Experiencing 2-25 years of teaching practice, all the teachers were teaching in public schools of Iranian Ministry of Education in Ilam and nearby cities. They were teaching as either full-time or part-time teachers. Some of them were also teaching in Farhangian University (Teacher training center) and some other universities across Ilam city. All the participants were native people from Ilam city or surrounding regions with comparable cultural and linguistic backgrounds. The first language of all of them was Ilami Kurdish. They were selected based on convenient sampling since they stood among the colleagues of the researchers. Therefore, they were effortlessly accessible and reliably collaborated in collecting the data. There was sufficient variety in participants’ gender, education level and teaching experience to formulate a representative sample of the population of Ilami English teachers.

4.2. Instrumentation

A checklist was used in the study as the instrument which included 30 sentences containing words in which a form of vowel reduction was supposed to occur according to the normal speech of native speakers of English. The 30 sentences consisted of 15 derivative words in which the vowel reduction is as the result of change in word category and shift of stress in the syllables as result of adding an affix. The other 15 ones contained function words in which vowel reduction occurs mostly in normal speech of native speakers. The instrument also contained a section for demographic information of the participants such as gender, teaching experience and education degree.

To collect the data, a page with 30 items containing words was provided in which the English vowels were supposed to be reduced. Also, a checklist was prepared to write down the accuracy of each vowel pronounced by the participants (correct or incorrect). In addition, an adequate sound recorder with high quality sound recording features was prepared and the participants’ voices were recorded for later analysis. The participants’ pronunciation was scored on the spot by the researchers as qualified native raters. In addition, the recorded voices were reanalyzed later to reassure the decisions made simultaneously with the participants’ reading of the page.

4.3. Data analysis

The data were analyzed by two skilled raters by means of the Statistical Package for Social Science. Descriptive statistics of gender, teaching experience, education degree and also frequencies of the accurate or inaccurate pronunciation for each vowel were calculated. Also, inferential statistics of One-Samples T-Test was employed to determine the effects of the individual characteristics on vowel reduction.

The participants of this study were 60 Ilami EFL teachers teaching English at high schools of Ilam city. Thirty of them were male and thirty female. The mother tongue of all participants was Ilami Kurdish. Their academic degree was different ranging from B.A., to PhD who had different experience of teaching varying from 0 to 30 years. (See Table 1)

Table 1 background information of the participants

<i>Participants</i>		<i>Frequency</i>	<i>Percent</i>
gender	Male	30	50.0
	Female	30	50.0
	Total	60	100.0
academic degree	B.A.	28	46.7
	M.A.	26	43.3
	PhD	6	10.0
	Total	60	100.0
experience	0-5	22	36.7
	6-10	16	26.7
	11-15	6	10.0
	16-20	4	6.7
	21-25	6	10.0
	26-30	6	10.0
	Total	60	100.0

5. Results and Discussion

The main goal of this study was to investigate vowel reduction in the pronunciation of Iranian high school EFL teachers. For this purpose three variables that might influence the pronunciation of reduced vowels were brought in to investigation. Then the relationship between each variable and the observing of vowel reduction in derivative words, function words and in general (both derivative and function words) were determined.

The first research question considers if there is a relationship between gender, teaching experience and academic degree of the Ilami High school EFL teachers and vowel reduction in general. Also, it was hypothesized that there is no relationship.

The results showed that there was a meaningful relationship between vowel reduction in general and gender of the participants. Regarding the effect of gender, in general, males were better than females in pronouncing the reduced vowels correctly. The results showed that males had higher means than those of females regarding pronunciation of vowels in general. Regarding teaching experience, there was a meaningful relationship between teaching experience and vowel reduction in general. Regarding pronunciation of vowels in general, the group with 16 to 20 years of experience had the highest mean. The second highest mean was for the group of 21 to 25 years of experience. The results also showed that until 20 years of teaching experience the means of pronunciation increase and after that decrease gradually. There was a meaningful relationship between academic degree and vowel reduction in general. Regarding the pronunciation of reduced vowels in general the PhDs had the highest mean. The results also showed that the means of vowel reduction increased with the academic degree. These findings reject the first hypothesis of the study, since a great deal of the answers, especially in female teachers and particularly in lower degrees had a lot of errors in pronouncing the reduced vowels. The other research questions sought to find any relationship between gender, years of experience and academic degree of Ilami High school EFL teachers and their observing vowel reduction in function words and in derivative words. It was hypothesized that there is no relationship. The results revealed that in spite of mean difference between the two genders, there was not a statistically significant relationship between vowel reduction in function words and gender of the participants. Thus, the null hypothesis of the study is supported. The results revealed that there was a meaningful relationship between vowel reduction in derivative words and gender of the participants. Also, the mean table showed that males had better performance than females in pronouncing the reduced vowels correctly. Opposite to the hypotheses of the study, there was a meaningful

relationship between teaching experience and vowel reduction in function words and in derivative words. The results showed that regarding pronunciation of vowels in function words and derivatives, the group with 16 to 20 years of experience had the highest mean. The second highest mean was for the group of 21 to 25 years of experience. The results also showed that until 20 years of teaching experience the means of vowel reduction increased and after that decreased gradually. Thus, the findings reject the null hypothesis of the study. Two research questions enquired if there is a relationship between academic degree of Ilami High school EFL teachers and their observing vowel reduction in function words and in derivative words. It was hypothesized that there is no relationship. However, the results rejected the null hypotheses and revealed that regarding pronunciation of vowels in function words and in derivatives, the PhDs had the highest mean. The results also showed that the means of pronunciation increased with the academic degree and so, respectively after PhDs were MAs followed by BAs.

In brief, the findings of this study in general showed that Iranian high school EFL teachers, especially those who have lower degree and less experience, pronounce English reduced vowels with problem to a great extent. Likewise, there was a meaningful relationship between gender and vowel reduction and female teachers showed to have more problem with correct pronunciation of reduced vowels. In addition, there was a meaningful relationship between teaching experience of Ilami High school EFL teachers and their observing vowel reduction in function words and in general, teachers with 16 to 25 years of teaching experience performed better in vowel reduction. Academic degree of Ilam High school EFL teachers had a meaningful relationship with their vowel reduction. The means of pronunciation of reduced vowels increased with increase of education level and so PhDs performed better than others and MAs were better than BAs.

The findings of this study contradict the findings of Yarbakhsh, Arjmandi & Rahimy (2014). They studied the relationship between gender and pronunciation accuracy in male and female EFL learners on a group of Iranian pre-intermediate EFL students. Their findings showed significant difference between male and female students in pronunciation accuracy and female students performed better.

Also the findings of this study do not agree with the findings of Jahandar, Khodabandehlou, Seyedi & Mousavi Dolatabadi (2012) who no difference between the two genders in pronunciation of vowels; but females performed better in pronouncing the consonant.

6. Conclusion

Based on the findings of the study it can be concluded that Ilami EFL teachers did not generally perform vowel reduction as it was expected. In fact, vowel reduction is neglected to a great extent in the high schools of Ilam. According to the results, teaching experience was an important factor in observing vowel reduction. Generally, correct pronunciation of reduced vowels enhanced with the increase of teaching experience until 20 years. The fact that correct vowel pronunciation in the more experienced teachers of above 20 years of experience decreases, especially above 25 years can be justified by the fact that English was not as important as today at universities and higher education centres. Also, academic degree was a significant factor in correct vowel reduction. The PhDs performed the best pronunciation of the reduced vowels.

The problem of vowel reduction which is generally determined by word stress is a major problem for both EFL teachers and students. In languages such as English in which stress affects word meaning, awareness of the rules of stress, stressed syllables and changing of word pronunciation as a result of derivations are of utmost importance. Seemingly, the problem of pronunciation and stress has not been paid ample attention in EFL contexts in Iran and is often neglected both in teacher training centres and in other universities and schools. In fact, it is due to lack of training that the incorrect transfer of mother tongue structure affects English pronunciation and in other words interferes with the English pronunciation.

“Overgeneralization” and “Mother Tongue Interference” are two important factors observed frequently among the sources of the problems. The latter mostly appears in the shape of non-existent linguistic items; that is items which exist in the second or foreign language, i.e. English, but not in the learners’ mother tongue.

To sum up, it would be sufficient to reiterate what Fromkin, Rodman, and Hyams (2003) stated that the knowledge of a language comprises of knowledge of morphemes, words, phrases, and sentences. It also covers the sounds of language and how they may be arranged to form meaningful units. Even though there may be some sounds in one

language that are absent in another, the sounds of all the languages of the world together form a limited set of the sounds that the human vocal tract can produce.

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